

CLAIMS

1. An apparatus for presenting content to a user, comprising:

a plurality of layout strings files;

a layout information file to describe how a layout string is displayed; and

a computer to store the layout strings files and the layout information file.

2. An apparatus according to claim 1, wherein each of the layout strings files stores the layout string in a language.

3. An apparatus according to claim 2, further comprising:

a resource file map to store at least two combinations of the layout information file and languages in which the layout strings files store the layout strings;

a ranked list of languages; and

a selector to select the layout information file and one layout strings file based on the ranked list of languages and the resource file map.

4. An apparatus according to claim 3, wherein:

the apparatus further comprises a plurality of layout information files, each layout information file defining how the layout string is displayed in a different language; and

the resource file map can store combinations of layout information files and languages in which the layout strings files store the layout strings.

5. An apparatus according to claim 3, wherein:

the apparatus further comprises a plurality of layout information files, each layout information file defining how the layout string is displayed in a different language on a different device; and

the resource file map can store combinations of layout information files, languages in which the layout strings files store the layout strings, and identities of devices upon which the information can be displayed.

6. An apparatus according to claim 3, wherein:

the apparatus further comprises a plurality of layout information files, each layout information file defining how the layout string is displayed on a different device; and

the resource file map can store combinations of the layout information files, languages in which the layout strings files store the layout strings, and identities of devices upon which the information can be displayed.

5 7. An apparatus according to claim 3, wherein the resource file map can store information about context-dependent data not stored in the layout information file or the layout strings files.

10 8. An apparatus according to claim 2, wherein each layout strings file includes a layout string in one language.

15 9. An apparatus according to claim 8, wherein the layout information file specifies a placement for the layout string on the default device.

20 10. An apparatus according to claim 2, wherein each layout strings file includes a language image in the language.

25 11. An apparatus according to claim 10, wherein the layout information file specifies a placement for the language image on the default device.

30 12. An apparatus according to claim 2, further comprising means for selecting the layout information file and one layout strings file based on a ranked list of languages.

 13. An apparatus according to claim 1, further comprising a device to display the layout string according to the layout information file, thereby presenting the layout string to user.

 14. An apparatus according to claim 1, wherein the layout information file describes how content and the layout string are displayed.

 15. An apparatus according to claim 14, further comprising a device to display the content and the layout string according to the layout information file, thereby presenting the content to the user.

16. A method for displaying content to a user, comprising:
locating a layout information file specifying how a layout string is to be presented to
the user;

5 locating one of a plurality of layout strings files storing the layout string; and
 presenting the layout string to the user according to the layout information file.

17. A method according to claim 16, wherein:
 locating a layout information file includes locating a layout information file
10 specifying how content and the layout string is to be presented to the user;
 the method further comprises obtaining the content from a content provider; and
 presenting the layout string to the user includes presenting the content and the layout
string to the user according to the layout information file.

15 18. A method according to claim 17, wherein locating one of a plurality of layout
strings files includes locating the one of the plurality of layout strings files storing the layout
string in a selected language.

19. A method according to claim 18, wherein locating a layout information file
20 includes locating a layout information file dependent on the selected language specifying how
the content is to be presented to the user.

20. A method according to claim 18, the method further comprising:
 receiving a ranked list of languages from the user;
25 accessing a resource file map listing recognized combinations of layout information
files and languages in which the layout strings file store the layout string; and
 identifying the selected language from the resource file map based on the ranked list
of languages.

30 21. A method according to claim 20, wherein identifying the selected language
includes identifying a highest-ranked language from the ranked list of languages such that the
layout information file and the one of the plurality of layout strings files exist for the highest-
ranked language.

22. A method according to claim 21, wherein:

the method further comprises determining a device on which to display the content to the user;

accessing a resource file map includes accessing a resource file map listing all combinations of layout information files, languages, and devices; and

identifying the selected language includes identifying the selected language from the resource file map based on the ranked list of languages and the device.

23. A method according to claim 22, wherein locating a layout information file includes locating a default layout information file specifying how the content is to be presented to the user if the resource file map does not specify a combination including a particular layout information file and at least one of the device or one of the languages in the ranked list of languages.

24. A method according to claim 21, wherein locating a layout information file includes locating a default layout information file specifying how the content is to be presented to the user if the resource file map does not specify a combination including a particular layout information file and one of the languages in the ranked list of languages.

25. A method according to claim 20, wherein:
accessing a resource file map includes accessing a resource file map storing information about other context-dependent data; and
presenting the content and the layout string to the user includes presenting the other context-dependent data to the user according to the layout information file.

26. A method according to claim 17, further comprising determining a device on which to display the content to the user.

27. A method according to claim 26, wherein locating a layout information file includes locating the layout information file specifying how the content is to be presented to the user on the device.

28. A method according to claim 26, wherein locating the one of the plurality of layout strings files further includes locating the one of the plurality of the layout strings files storing device-dependent layout strings.

5 29. A method according to claim 26, wherein presenting the content and the layout string includes presenting the content and the layout string to the user on the device according to the layout information file.

30. A method according to claim 17, wherein:
10 the method further comprises:

locating a second layout information file specifying how a second content is to be presented to the user; and

15 locating a second of the layout strings files storing a second layout string; and presenting the content and the layout string includes presenting the content, the second content, the layout string, and the second layout string to the user according to the layout information file and the second layout information file.

31. One or more computer-readable media containing a program to display content to a user, comprising:

20 location software to locate a layout information file specifying how a layout string is to be presented to the user;

location software to locate one of a plurality of layout strings files storing the layout string; and

25 presentation software to present the layout string to the user according to the layout information file.

32. One or more computer-readable media containing a program according to claim 31, wherein:

30 the location software to locate a layout information file includes location software to locate a layout information file specifying how content and the layout string is to be presented to the user;

the program further comprises obtaining software to obtain the content from a content provider; and

the presentation software to present the layout string to the user includes presentation software to present the content and the layout string to the user according to the layout information file.

5 33. One or more computer-readable media containing a program according to claim 32, wherein the location software includes location software to locate the one of the plurality of layout strings files storing the layout string in a selected language.

10 34. One or more computer-readable media containing a program according to claim 33, wherein the location software includes location software to locate a layout information file dependent on the selected language specifying how the content is to be presented to the user.

15 35. One or more computer-readable media containing a program according to claim 33, the program further comprising:
 reception software to receive a ranked list of languages from the user;
 accessing software to access a resource file map listing recognized combinations of layout information files and languages in which the layout strings file store the layout string;
 and
20 identification software to identify the selected language from the resource file map based on the ranked list of languages.

25 36. One or more computer-readable media containing a program according to claim 31, wherein the identification software to includes identification software to identify a highest-ranked language from the ranked list of languages such that the layout information file and the one of the plurality of layout strings files exist for the highest-ranked language.

30 37. One or more computer-readable media containing a program according to claim 36, wherein the locating software includes location software to locate a default layout information file specifying how the content is to be presented to the user if the resource file map does not specify a combination including a particular layout information file and one of the languages in the ranked list of languages.

38. One or more computer-readable media containing a program according to claim 32, wherein:

the program further comprises:

location software to locate a second layout information file specifying how a second content is to be presented to the user; and

location software to locate a second of the layout strings files storing a second layout string; and

the presentation software includes presentation software to present the content, the second content, the layout string, and the second layout string to the user according to the layout information file and the second layout information file.

39. An article comprising:

a computer-readable modulated carrier signal;

means embedded in the signal for locating a layout information file specifying how a layout string is to be presented to a user;

means embedded in the signal for locating one of a plurality of layout strings files storing the layout string; and

means embedded in the signal for presenting the layout string to the user according to the layout information file.

40. An article according to claim 39, wherein:

the means embedded in the signal for locating a layout information file means embedded in the signal for includes locating a layout information file specifying how content and the layout string is to be presented to the user;

the article further comprises means embedded in the signal for obtaining the content from a content provider; and

the means embedded in the signal for presenting the layout string to the user includes means embedded in the signal for presenting the content and the layout string to the user according to the layout information file.

41. An article according to claim 40, wherein the means embedded in the signal for locating one of a plurality of layout strings files includes means embedded in the signal

for locating the one of the plurality of layout strings file storing the layout string in a selected language.

42. An article according to claim 41, wherein the means embedded in the signal
5 for locating a layout information file includes means embedded in the signal for locating a layout information file dependent on the selected language specifying how the content is to be presented to the user.

43. An article according to claim 41, further comprising:
10 means embedded in the signal for receiving a ranked list of languages from the user;
means embedded in the signal for accessing a resource file map listing recognized combinations of layout information files and languages in which the layout strings file store the layout string; and
means embedded in the signal for identifying the selected language from the resource
15 file map based on the ranked list of languages.

44. An article according to claim 43, wherein the means embedded in the signal
for identifying the selected language includes means embedded in the signal for identifying a
highest-ranked language from the ranked list of languages such that the layout information
20 file and the one of the plurality of layout strings files exist for the highest-ranked language.

45. An article according to claim 44, wherein the means embedded in the signal
for locating includes means embedded in the signal for locating a default layout information
file specifying how the content is to be presented to the user if the resource file map does not
25 specify a combination including a particular layout information file and one of the languages in the ranked list of languages.

46. An article according to claim 40, wherein:
the article further comprises:

30 means embedded in the signal for locating a second layout information file specifying how a second content is to be presented to the user; and

means embedded in the signal for locating a second of the layout strings files storing a second layout string; and

the means embedded in the signal for presenting the content includes means embedded in the signal for presenting the content, the second content, the layout string, and the second layout string to the user according to the layout information file and the second layout information file.

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47. A method for using a selected context to display content to a user, comprising: locating a layout information file specifying how the content is to be presented to the user;

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locating a layout strings file storing a layout string in the selected context; and presenting the content and the layout sting in the selected context to the user according to the layout information file.

48. A gadget file structure, comprising:

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a first directory storing at least two layout strings files, each layout strings file storing a layout string in a language;

a second directory storing at least one layout information file for a device, the layout information file designed to be combined with one of the layout strings files and content to display the layout string and the content to a user in a selected language on the device; and

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a resource file map identifying valid combinations of layout information files and languages in which the layout strings files store layout strings for the device.

49. A gadget file structure according to claim 48, wherein:

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the gadget file structure further comprises a third directory storing at least one layout information file for a second device, the layout information file designed to be combined with one of the layout strings files and the content to display the layout string and the content to the user in the selected language on the second device; and

the resource file map further identifies valid combinations of layout information files in the third directory and languages in which the layout strings files store layout strings for the second device.

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50. A gadget file structure according to claim 48, wherein:

the gadget file structure further comprises a third directory storing at least one alternative layout information file for the device, the alternative layout information file

designed to be combined with one of the layout strings files and the content to display the layout string and the content to the user in the selected language on the device; and

the resource file map further identifies valid combinations of layout information files in the third directory and languages in which the layout strings files store layout strings for the device.

51. A gadget file structure according to claim 48, wherein:

the gadget file structure further comprises a third directory storing at least one language-dependent layout information file for the device, the language-dependent layout information file designed to be combined with one of the layout strings files and the content to display the layout string and the content to the user in the selected language on the device; and

the resource file map further identifies valid combinations of layout information files in the third directory and languages in which the layout strings files store layout strings for the device.

52. A gadget file structure according to claim 48, wherein the resource file map further identifies other context-dependent data.

53. An apparatus for presenting content to a user, comprising:

a file storing a plurality of layout strings sub-files and a layout information sub-file to describe how a layout string is displayed;

a resource file map to store at least two combinations of the layout information sub-file and languages in which the layout strings sub-files store the layout strings;

a computer to store the file and the resource file map;

a ranked list of languages; and

a selector to select the layout information sub-file and one layout strings sub-file based on the ranked list of languages and the resource file map.